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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,192

10/15/2003

Mihail Iotov

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EXAMINER

GARBOWSKI, LEIGH M

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/687,192

Applicant(s)

IOTOV, MIHAIL

Examiner

Leigh Marie Garbowski

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6-12,14,15,20-26,28,29,33-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 2-5,13,16-19,27,30-32 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date (10/15/2003).
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-10, 20-24, 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 20, 33 provide for the use of "using time-domain multiplexing", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. It is not clear from the language what the time-domain multiplexing is used for in relation to the method and steps already established.

Claims 10, 24, 35 provide for the use of "using multiple instantiations of the optimal candidate module", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. It is not clear from the language what the multiple instantiations are used for in relation to the method and steps already established.

The remaining claims, though not specifically mentioned, are rejected for incorporating the errors of their respective base claims by dependency.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 11-12, 15, 25-26, 29, 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Goslin et al. [U.S. Patent #6,120,549].

As per claims 1, 11-12/15, 25-26/29, 36, a method/computer program product/apparatus comprising: receiving input information identifying a desired module and a desired input data rate associated with the desired module [column 3, lines 47-50; column 7, lines 45-51]; identifying a plurality of candidate modules, the plurality of candidate modules having simulation information indicating associated data rates [column 5, lines 17-22; column 7, lines 45-51]; and selecting an optimal candidate module from the pool of candidate modules, the optimal candidate module selected using the desired input data rate [column 6, lines 48-54; column 7, lines 53-65].

Claims 1, 14-15, 28-29, 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chiu et al. [U.S. Patent Application Publication # 2004/0107078 A1].

As per claims 1/15/29, a method/computer program product/apparatus comprising: receiving input information identifying a desired module and a desired input data rate associated with the desired module [0028]; identifying a plurality of candidate modules, the plurality of candidate modules having simulation information indicating associated data rates [0027, 0029]; and selecting an optimal candidate module from the pool of candidate modules, the optimal candidate module selected using the desired input data rate [0031, 0045, 0047-48]. As per claims 14, 28, 38, further comprising receiving system clock information [0032-36].

#### ***Allowable Subject Matter***

Claims 2-5, 13, 16-19, 27, 30-32, 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or teach further comprising receiving a desired output latency associated with the desired module in combination with all of the

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features recited through dependency in total, or further comprising performing timing simulation using the optimal candidate module in combination with all of the features recited through dependency in total.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ahanessians et al. [U.S. Patent #6,401,230 B1] disclose an interface providing user options including input data rates [column 9, lines 17-37]. Gupta et al. [U.S. Patent #6,385,757 B1] disclose designing programmable processors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Marie Garbowski whose telephone number is 571-272-1893 and e-mail is Leigh.Garbowski@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LEIGH M. GARBOWSKI  
PRIMARY EXAMINER